

**IN THE CLAIMS:**

Please AMEND claims 1, 21-24, 28, and 32-41, as shown below.

1. (Currently Amended) A method, comprising:

allocating a plurality of sets of sequential subcarriers in a multicarrier modulation communication system to a plurality of users, each of said plurality of sets of sequential subcarriers comprising at least two subcarriers having different frequencies, wherein the a size of a at least one set of the plurality of sequential subcarriers is greater than the a smallest coherence bandwidth of used in a channel currently being used by at least one of the plurality of users, wherein each user of the plurality of users has a respective channel profile including a respective coherence bandwidth and the size of at least one set of the plurality of sets of sequential subcarriers is greater than a smallest one of the coherence bandwidths of the plurality of users.

2-11 (Cancelled)

12. (Previously Presented) A method as defined in claim 1, wherein the size of a set of sequential subcarriers comprises a power of two.

13-14 (Cancelled)

15. (Previously Presented) A method as defined in claim 1, wherein within an allocation period each set of sequential subcarriers is of the same size.

16-17 (Cancelled)

18. (Original) A method as defined in claim 1, wherein said allocating the plurality of sets of sequential subcarriers comprises taking into account channel properties of at least one user.

19-20 (Cancelled)

21. (Currently Amended) ~~A device, configured to:~~ An apparatus, comprising:  
a controller configured to allocate a plurality of sets of sequential subcarriers in a multicarrier modulation communication system to a plurality of users, each of said plurality of sets of sequential subcarriers comprising at least two subcarriers having different frequencies in an allocation period, wherein the a size of a at least one set of the plurality of sequential subcarriers is greater than the a smallest coherence bandwidth of used in a channel being used by at least one of the plurality of users, wherein each user of the plurality of users has a respective channel profile including a respective coherence bandwidth and the size of at least one set of the plurality of sets of sequential subcarriers is greater than a smallest one of the coherence bandwidths of the plurality of users.

22. (Currently Amended) ~~A device~~ The apparatus as defined in claim 21, which is a network element for a cellular telecommunications network.

23. (Currently Amended) ~~A multicarrier modulation communication system,~~  
~~configured to comprising:~~

a controller configured to allocate a plurality of sets of sequential subcarriers in a multicarrier modulation communication system to a plurality of users in an allocation period, each of said plurality of sets of sequential subcarriers comprising at least two subcarriers having different frequencies, wherein the a size of a at least one set of the plurality of sequential subcarriers is greater than the a smallest coherence bandwidth of used in a channel being used by at least one of the plurality of users, wherein each user of the plurality of users has a respective channel profile including a respective coherence bandwidth and the size of at least one set of the plurality of sets of sequential subcarriers is greater than a smallest one of the coherence bandwidths of the plurality of users.

24. (Currently Amended) A method, comprising:

transmitting at least one signal relating to at least one set of sequential subcarriers in a multicarrier modulation communication system among a plurality of sets of sequential subcarriers allocated in an allocation period to a plurality of users, each of said plurality of sets of sequential subcarriers comprising at least two subcarriers having

different frequencies wherein the size of at least one set of the plurality of sequential subcarriers is greater than the smallest coherence bandwidth of used in a channel currently being used by at least one of the plurality of users, wherein each user of the plurality of users has a respective channel profile including a respective coherence bandwidth and the size of at least one set of the plurality of sets of sequential subcarriers is greater than a smallest one of the coherence bandwidths of the plurality of users.

25. (Original) A method as defined in claim 24, further comprising:

allocating the plurality of sets of sequential subcarriers for transmitting information to the plurality of users.

26. (Original) A method as defined in claim 25, further comprising:

transmitting a plurality of signals to the plurality of users.

27. (Original) A method as defined in claim 24, further comprising:

allocating the plurality of sets of sequential subcarriers for transmitting information from the plurality of users.

28. (Currently Amended) A method, comprising:

receiving at least one signal relating to at least one set of sequential subcarriers in a multicarrier modulation communication system among a plurality of sets of sequential

subcarriers allocated to a plurality of users in an allocation period, each of said plurality of sets of sequential subcarriers comprising at least two subcarriers having different frequencies wherein the a size of a at least one set of the plurality of sequential subcarriers is greater than the a smallest coherence bandwidth of used in a channel currently being used by at least one of the plurality of users, wherein each user of the plurality of users has a respective channel profile including a respective coherence bandwidth and the size of at least one set of the plurality of sets of sequential subcarriers is greater than a smallest one of the coherence bandwidths of the plurality of users.

29. (Original) A method as defined in claim 28, further comprising:  
allocating the plurality of sets of sequential subcarriers for receiving information from the plurality of users.

30. (Original) A method as defined in claim 29, further comprising:  
receiving a plurality of signals from the plurality of users.

31. (Original) A method as defined in claim 28, further comprising:  
allocating the plurality of sets of sequential subcarriers for receiving information in the plurality of users.

32. (Currently Amended) ~~A device configured to:~~ An apparatus, comprising:

a transmitter configured to transmit at least one signal relating to at least one set of sequential subcarriers in a multicarrier modulation communication system among a plurality of sets of sequential subcarriers allocated to the plurality of users in an allocation period each of said plurality of sets of sequential subcarriers comprising at least two subcarriers having different frequencies wherein the a size of a at least one set of the plurality of sequential subcarriers is greater than the a smallest coherence bandwidth of used in a channel currently being used by at least one of the plurality of users, wherein each user of the plurality of users has a respective channel profile including a respective coherence bandwidth and the size of at least one set of the plurality of sets of sequential subcarriers is greater than a smallest one of the coherence bandwidths of the plurality of users.

33. (Currently Amended) ~~A device~~ An apparatus as defined in claim 32, wherein the plurality of sets of sequential subcarriers is allocated for transmitting information to the plurality of users.

34. (Currently Amended) ~~A device~~ An apparatus as defined in claim 32, wherein the plurality of sets of sequential subcarriers is allocated for transmitting information from the plurality of users, the ~~device~~ apparatus corresponding to at least one of the users.

35. (Currently Amended) ~~A device, configured to:~~ An apparatus, comprising:

a receiver configured to receive at least one signal relating to at least one set of sequential subcarriers in a multicarrier modulation communication system among a plurality of sets of sequential subcarriers allocated to a plurality of users in an allocation period each of said plurality of sets of sequential subcarriers comprising at least two subcarriers having different frequencies wherein the a size of a at least one set of the plurality of sequential subcarriers is greater than the a smallest coherence bandwidth of used in a channel currently being used by at least one of the plurality of users, wherein each user of the plurality of users has a respective channel profile including a respective coherence bandwidth and the size of at least one set of the plurality of sets of sequential subcarriers is greater than a smallest one of the coherence bandwidths of the plurality of users.

36. (Currently Amended) ~~A device~~ An apparatus as defined in claim 35, wherein the plurality of sets of sequential subcarriers is allocated for receiving information from the plurality of users.

37. (Currently Amended) ~~A device~~ An apparatus as defined in claim 35, wherein the plurality of sets of sequential subcarriers is allocated for receiving information in the plurality of users, the ~~device~~ apparatus corresponding to at least one of the users.

38. (Currently Amended) ~~A device~~ An apparatus as defined in ~~claim 34~~ claim 35,  
the ~~device~~ apparatus further configured to allocate the plurality of sets of sequential  
subcarriers.

39. (Currently Amended) ~~A device~~ An apparatus as defined in ~~claim 35~~ claim 34,  
wherein the ~~device~~ apparatus is for a cellular telecommunications network.

40. (Currently Amended) ~~A transmitter~~ An apparatus, comprising:  
an allocating unit configured to allocate a plurality of sets of sequential subcarriers  
in a multicarrier modulation communication system to a plurality of users each of said  
plurality of sets of sequential subcarriers comprising at least two subcarriers having  
different frequencies wherein ~~the~~ a size of ~~a~~ at least one set of the plurality of sequential  
subcarriers is greater than ~~the~~ a smallest coherence bandwidth ~~of~~ used in a channel  
currently being used by at least one of the plurality of users, wherein each user of the  
plurality of users has a respective channel profile including a respective coherence  
bandwidth and the size of at least one set of the plurality of sets of sequential subcarriers  
is greater than a smallest one of the coherence bandwidths of the plurality of users; and  
~~a transmitting unit~~ transmitter configured to transmit at least one signal to the  
plurality of users, wherein the signal comprises information of at least one of said  
plurality of sets of sequential subcarriers.



41. (Currently Amended) ~~A receiver~~ An apparatus, comprising:

~~a receiving unit~~ receiver configured to receive at least one signal, wherein the signal relates to at least one set of sequential subcarriers in a multicarrier modulation communication system among a plurality of sets of sequential subcarriers allocated to a plurality of users, each of said plurality of sets of sequential subcarriers comprising at least two subcarriers having different frequencies wherein ~~the~~ a size of ~~a~~ at least one set of the plurality of sequential subcarriers is greater than ~~the~~ a smallest coherence bandwidth ~~of~~ used in a channel currently being used by at least one of the plurality of users, wherein each user of the plurality of users has a respective channel profile including a respective coherence bandwidth and the size of at least one set of the plurality of sets of sequential subcarriers is greater than a smallest one of the coherence bandwidths of the plurality of users; and

~~an operating unit~~ a controller configured to operate ~~the receiving unit~~ receiver to use the at least one set of sequential subcarriers.

42-50 (Cancelled)

51. (Previously Presented) A method as defined in claim 18, wherein the channel properties include the channel response of at least one user for each set.

52. (Previously Presented) A method as defined in claim 51, wherein the channel response for a set is measured for one of the plurality of subcarriers of the set.

53. (Previously Presented) A method as defined in claim 51, wherein the channel response for a set is measured at the lowest subcarrier of the set.